

CRUSH AND CREDIT: PUT CONTROL OF RECYCLABLES MANAGEMENT INTO THE HANDS OF THE PRIVATE SECTOR

ISSUE

Although the return rate in BC is good in most areas for recyclables, improvement is possible to reduce containers going into the waste stream. The current recyclable law in BC, the “Bottle Bill”¹ restricts consumers to 24 containers per return visit to retailers. The restriction covers tetra boxes, plastic bottles, aluminum cans and glass bottles.

An increasing amount of container waste has created critical issues regarding container disposal due to a limited number of landfills and restricted recycling depots, particularly in rural BC. It is pivotal to adopt new recycling technology to manage waste effectively.

The current manual recycling method is discouraging as users are required to collect the waste in bulk. The reverse vending machine (RVM) can be used in varied applications which provide refunds to customers by identifying the amount for each container. As a business opportunity, the revenue growth of the global reverse vending market is driven by new installations and servicing of older machines. Governments continue to pass new regulations to promote the reuse, reduce, and recycle philosophy. This is anticipated to propel the demand for reverse vending machine demand² in the immediate future.

In BC, Encorp Pacific has one trial RVM in place as a pilot in a return depot.

BACKGROUND

The return rate in BC for all containers slipped slightly in 2018 from 2017 and is currently 82%, which is above the BC Government target of 75%. Consumers return large quantities of purchased containers to recycling depots throughout the province operated by industry consortium Encorp Pacific. The Minister of the Environment is empowered to make significant changes to the system. Rural and Indigenous communities have lower return rates.

Containers contribute to the waste stream in BC, particularly in remote and some Indigenous communities. Trucking of empty containers to central depots has an unnecessarily large carbon footprint, due to air in empty containers, prior to their being crushed and re-distributed to recycling users throughout BC. Reverse vending functions through UPC codes, and vendor credits.³

¹ http://www.qp.gov.bc.ca/statreg/reg/E/EnvMgmt/449_2004.htm#Schedule1BeverageContainerProductCategory

² The reverse vending machine market can be categorized as a broader industry for waste sorting, gathering, and recycling. The service amount depends upon the machine's volume and age, wherein higher volume machines require longer servicing cycles. Technological advancements in reverse vending machines such as video recognition systems, touch panels, and smart card vouchers are expected to enhance the user experience. This, in turn, is anticipated to propel the market. *The Independent, January 3, 2019*

³ <https://www.youtube.com/watch?v=gPmBJxKT07U>

SOLUTION

Return rates internationally in countries introducing in-retailer “reverse vending machines” are in the high 80% - high 90% range⁴. Individual deposit rates on containers in BC are also low by international and other provincial standards, averaging 5¢ to 10¢ versus an average of 40¢ internationally (Norway, Sweden, Australia). When reverse vending machines are readily available, container waste drops by an average of 50%. Higher deposit rates encourage higher recycling rates. Other initiatives could also be taken to increase return rates, according to Encorp Pacific.⁵

The reverse vending machine presents a robust new business growth opportunity. Installing and servicing machines is a mature industry in Europe and Australia,⁶ where the machines were adopted in the 1970s, and increasingly, in the US. Quebec has used reverse vending machines for many years; their return laws are different from BC's. The business opportunity in BC for introduction and growth is enormous⁷.

Internationally, innovative recycling methods increase recycling percentages. Manufacturers have low incentives to improve recycling rates. Tetra packs have a laborious delamination process prior to recycling. This packaging is cheap for suppliers to manufacture but lacks consideration of environmental impact. In BC, the newer “bag drop system” in use now across Canada and in the US remains restricted to bottle return depots. In this iteration, bulk bags are marked with a UPC code based on consumer-entered information, and automatic deposits of return funds are made to the consumer's bank account. The system is unwieldy and still requires a trip to bottle depots. The bulk system encourages the use of single use plastic bags that are currently on the radar for elimination from usage streams.

THE CHAMBER RECOMMENDS

That the BC Government:

1. Promote RVMs to increase the recyclable stream:
 - a. Especially in remote areas
 - b. To create new business opportunities
2. Increase deposit fees on all recyclables to at least the international standard ~ 40¢.

⁴ “Can Norway help us solve the plastic crisis, one bottle at a time?” July 12, 2018

<https://www.theguardian.com/environment/>

⁵ Letter from Allen Langdon, President and CEO, Encorp Pacific (Canada) May 7, 2019.

⁶ The reverse vending machine market can be segmented based on product type, machine use, capacity, end-use, and regions. In terms of product type, the market can be divided into metal recycling, plastic bottle recycling, and multifunction recycling. Based on machine use, the reverse vending machine market can be classified into commercial, industrial, and residential. In terms of capacity, the market can be categorized into less than 200 (cans or bottles), 200 – 300 (cans or bottles), 300 – 600 (cans or bottles), and more than 600 (cans or bottles). Based on end-use, the market can be segmented into distributors, retailers, municipalities, and beverage industries. *SBWire, July 27, 2018*

⁷ In terms of geography, the reverse vending machine market can be segmented into North America, Europe, Asia Pacific, Middle East & Africa, and South America. North America is expected to dominate the market as the region has stable demand for reverse vending machines from governments, retailers, and beverage industries. The market in Asia Pacific is expected to expand at a significant compound annual growth rate from 2017 to 2025 due to the expansion of the food service industry. *SBWire, July 27, 2018*

Submitted by the Kelowna Chamber of Commerce; supported by the Greater Vernon Chamber of Commerce, the Greater Westside Board of Trade, the Peachland Chamber of Commerce, the Summerland Chamber of Commerce and the Penticton & Wine Country Chamber of Commerce.